**IT Applications, Unit 4**

**Ch 6: Developing A solution using spreadsheet software, p 192-195**

**Case Study: Point Pleasant Social Service Program – organisational outline and current practice**

**Read the case study:**

**Complete the ‘Think About IT 6.3’ activity:**

1. **Which current practices at Point Pleasant High School have led to inaccurate information?**

At Point Pleasant High School Mr Greene manually calculates the totals of each fundraising effort and tallys the total amount for each class group. This unprocessed calculation leaves a large margin for error of input and actual calculation of the figures.

1. **What types of validation errors might occur using the current information processing methods?**

Validation errors that might occur using the current information processing methods include incorrect data entry (into the calculator or when writing down the numbers to calculate it on paper) and incorrect calculation (whilst adding up all the totals you could incorrectly add the numbers or perform the wrong function on the calculator, e.g. accidentally press minus instead of plus).

**Analysing the problem**

**In the analysis stage there are three parts, elaborate under each of the following:**

* 1. **Define the problem**

Defining the problem is necessary because it gives you a goal and allows you to know exactly what you are going to fix. If a problem was not defined, it is hard to establish what steps are needed to improve the information system.

* 1. **Solution requirements**

The solution requirements are determined by establishing its functional attributes and non function attributes.

* + 1. **What is the difference between functional and non-functional attributes**

Function attributes entail what the solution must be able to do and non-functional attributes include user friendliness, reliability, portability, robustness and maintainability.

* 1. **Constraints**
     1. **List the constraints**
* Cost
* Speed of processing
* Requirements of users
* Legal requirements
* Security
* Compatibility
* Level of expertise
* Capacity
* Availability of equipment
  1. **Scope of solution**
     1. **Describe the scope or the extent of the solution.**

The scope of the solution must be agreed on. These boundaries and parameters are very important because they state what the solution will and won’t be able to do and also the benefits to the user.